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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/063,315	04/10/2002	Alejandro Berenstein	S63.2-10039	6886
490	7590	05/03/2004		
VIDAS, ARRETT & STEINKRAUS, P.A. 6109 BLUE CIRCLE DRIVE SUITE 2000 MINNETONKA, MN 55343-9185			EXAMINER WEBB, SARAH K	
			ART UNIT	PAPER NUMBER
			3731	

DATE MAILED: 05/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/063,315	BERENSTEIN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Sarah K Webb	3731	

-- **Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/22, 9/18, 7/1/02</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 1-9, 11-13, 16, 18, and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 includes the limitation "balloon expandable or self-expandable." It is unclear what applicant intends to claim as the invention. To explain further, claim 4 states that the ends are self-expandable, while claim 1, from which claim 4 depends, includes "balloon expandable or self-expandable." In paragraph [0011] of the specification, applicant explains that "braided" ends are self-expanding, while "interconnected serpentine segments" are balloon-expandable. So, it is contradictory for claim 8 (interconnected serpentine segments) to also include the limitation in claim 1 "self-expandable." Claim 18 is indefinite for this reason, because it is unclear whether the last step includes balloon expansion or self-expansion of the stent.

Claims 11 and 12 recite the limitation "the tubular, non-coil segment" in line 1. There is insufficient antecedent basis for this limitation in the claims.

Claim 16 is indefinite, because it fails to particularly point out what parts of the stent of claim 15 are to have an outer diameter of no more than 6 mm. Claim 15 already states that the coil segment of the stent has a particular diameter, so claim 16 is redundant.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 9-14, and 18-22 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 5,911,732 to Hojeibane.

Hojeibane discloses a stent in Figure 3 that includes a coil segment (5) that connects two non-coil segments (271,272). Hojeibane explains that the stent can be either balloon expandable (column 8, lines 23-25) or self-expandable (column 9, lines 15-17). Regarding claims 18, Hojeibane provides a method of treating a vessel, which includes providing a catheter, delivering the stent to a location, and deploying the stent (column 8, lines 14-35). The stent of Hojeibane can inherently be deployed across an aneurysm. Hojeibane explains that the stent of Figure 3 may be used with this method (column 7, lines 53-55). Regarding claims 20-22, Hojeibane describes methods of manufacturing the stent, including attaching the connecting bars by adhesive bonding or welding (column 6, line 19 and column 7, paragraph 1). The coil segment, or connector, is made of thin steel (column 7, line 11). Since the connector (5) is steel and in the shape of a coil, or spring, it is inherently "spring steel."

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 3,4,7,8 and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hojeibane.

Hojeibane includes all the limitations of claim 3, except for including more than one coil segment instead of only one coil segment. It would have been obvious to one of ordinary skill in the art at the time the invention was made to limit the number of coil segments of the Hojeibane stent to *only one*, since this involves only a mere reduction in the number of a repetitive component.

Regarding claim 8: Hojeibane does not form the tubular, non-coil segments (271,272) of the stent in Figure 3 as interconnected serpentine segments, but Hojeibane does describe the structure of Figure 3 as "a series of cell type stents 271,272" (column 7, line 35). The stent in Figure 1 includes tubular, non-coil segments connected by members (77a), which is similar to the basic structure of the Figure 3 embodiment. The non-coil segments are in the form of a plurality of interconnected serpentine segments. It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the "cell type" segments of Figure 3 as interconnected serpentine segments, as Hojeibane teaches that this is simply an alternative form of tubular, non-coil segments.

Regarding claims 15-17, Hojeibane fails to limit the diameter of the stent to 6 mm and the length to 20 mm. Hojeibane does state that the expanded diameter of the stent is variable (column 5, line 62) and the length can range from 3 cm (30 mm) to 18 cm

(column 6, line 57). Applicant admits in the specification (paragraph 69) that the diameter of the stent can range from 1.5 mm to 25 mm and the length of the stent can range from 3 mm to 100 mm. It would have been an obvious matter of design choice to alter the dimensions of the Hojeibane stent, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art.

4. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hojeibane in view of US Patent No. 6,258,117 to Camrud et al.

Hojeibane includes all the limitations of claims 5 and 6 except for forming the non-coil sections as a braided structure. Camrud discloses multi-segment stents (92) in Figures 6A-C and 8A&B that are similar to the Hojeibane stent in that the structure includes segments (12,14,16,18) linked by connecting elements (94,96). Camrud teaches that the segments can be formed as a woven, or "braided", structure (column 9, line 28). Camrud also teaches that the segments can be either balloon expandable or self-expandable (column 1, lines 18-25), and the materials for the stent include steel and Nitinol (column 9, lines 32-34). Since both devices are multi-segment stents, it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute a braided structure, as taught by Camrud, for the non-coil segment of Hojeibane, as this is an alternate way to form a segment of a stent that has multiple segments linked by connection elements.


**Conclusion**


5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent No. 6,192,944 (Greenhalgh) discloses a bifurcated stent in Figure 10 that has a coil (26) connected to braided ends (24,22). US Patent No. 6,383,171 (Gifford et al.) teaches that braided end segments (12) are useful for expanding and anchoring intravascular devices.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sarah K Webb whose telephone number is (703) 605-1176. The examiner can normally be reached on Mon-Fri 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Milano can be reached on (703) 308-2496. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
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04-21-04